

radius

Antimicrobial Resistance

Voter Research

Full Report (11.11.24)

October 2024 | Prepared for:



Research Objectives

Sepsis Alliance is interested in understanding what registered voters think about Antimicrobial Resistance (AMR) to inform discussions with elected officials, as well as potential education and grant funding.

Specifically, this research seeks to:

- Assess voter **understanding of Antimicrobial Resistance (AMR)**, its effects, and how to prevent it
- Gain insight into the current **reliance** on antimicrobial **medications** and their effectiveness
- Pinpoint if voters **consider AMR** to be a current **threat** and if they expect the Antimicrobial Resistance **problem** to be growing
- Assess **familiarity with the Pasteur Act** and whether voters would **support** a member of Congress who worked to get the bill passed
- Potential **education and grant funding** and **policy** initiatives.

Methodology: How we approached this research...



Who?

n=2,021 Registered Voters
Representative mix across age, gender, ethnicity/race, and US region, based on the US census



What?

10-minute online quantitative survey



Where?

U.S.



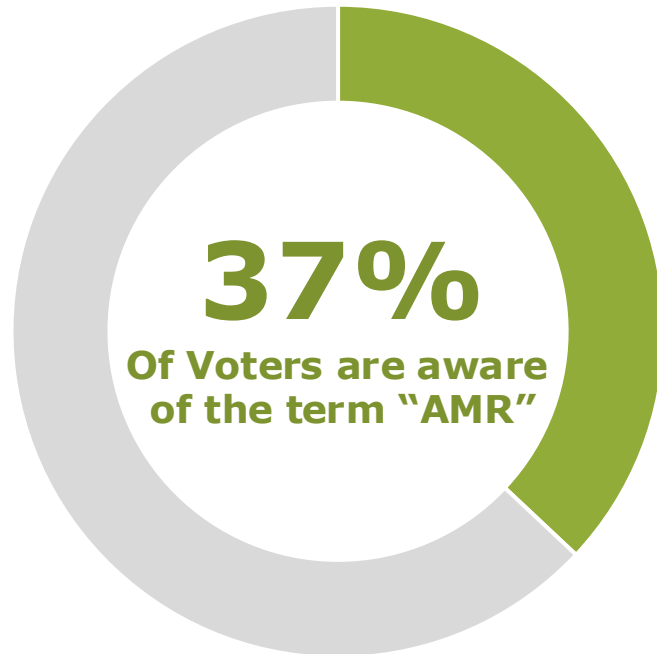
When?

Fielding:
September 25 – October 11, 2024

Key Findings

Awareness of Antimicrobial Resistance and its effects are low – although there is some understanding of the danger of infections.

A little more than one-third of registered voters are aware of the term Antimicrobial Resistance (AMR)...



Voters have higher awareness of "Antibiotic Resistance (ABR)", with **6 in 10** being aware of that term.

... Which contributes to confusion about the descriptions of AMR or its effects

44%

Do not know what AMR is

21%

Identify at least one *incorrect* description of AMR

Just over half are able to **identify complications** of infections, including sepsis and death

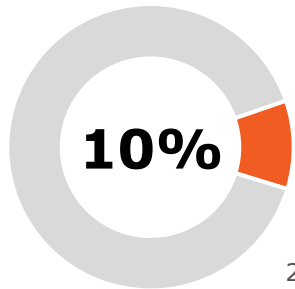
Fewer than half indicate knowing that **loss of limbs** can be a complication of infections

As many voters have recent experience with antimicrobials, the challenge is that a sizeable proportion are either not finishing the full course or the initial prescription is not working, and they are requiring additional medications

Many voters were treated with antimicrobials in past 12 months

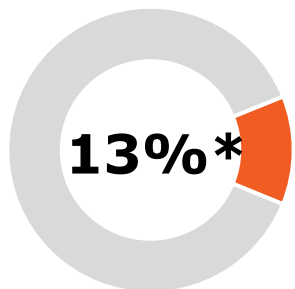


Of those starting an antimicrobial, about 1 in 10 did not finish the full course...

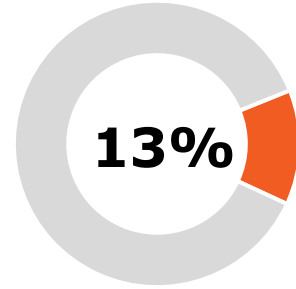


= 23.6M+ unfinished prescriptions*

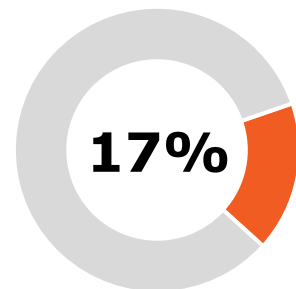
*Based on 2022 CDC estimate of 236.4M antibiotic prescriptions total



....and for more than 1 in 10 the first prescription did not work



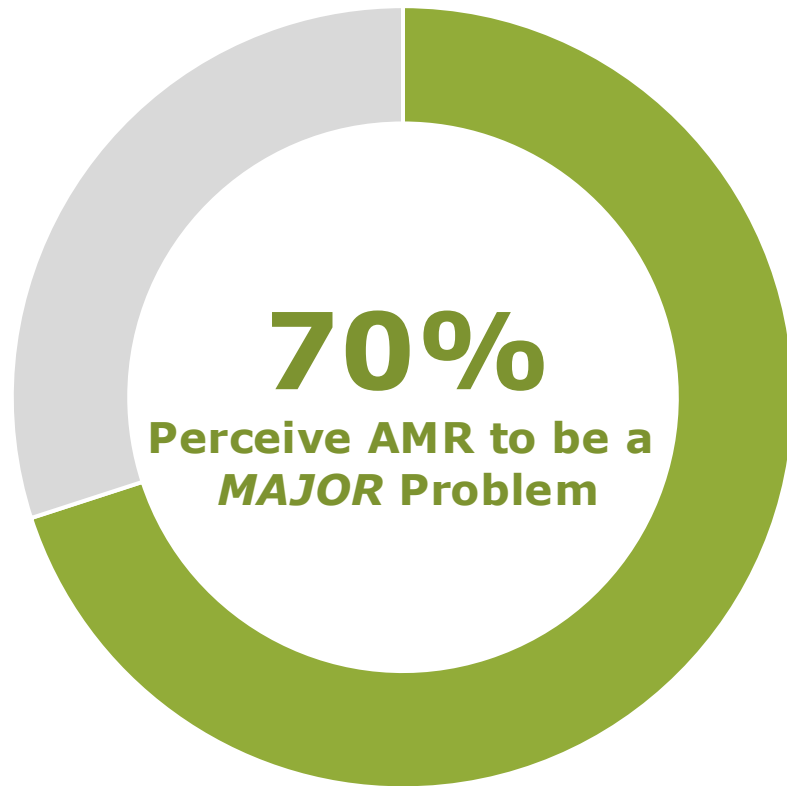
Of which **72%** required additional medications (2.0 on average)



Of which **96%** required additional medications (2.6 on average)

Once informed about AMR, most consider it a problem and a potential threat to the population.

After being given a definition* of AMR...



And many express concerns around AMR

80%

Believe AMR is a threat to the population as a whole, and...

67%

...believe the AMR problem is growing

Around **6 in 10** consider the **overuse of antibiotics** and people **not finishing antibiotics** to be major problems.

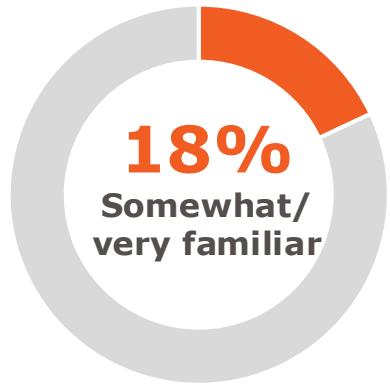
Fewer than half see the ability to **develop new drugs** to treat infections as a problem, but around **two-thirds** are at least **somewhat worried** about that.

Overall, most **are aware** of the different ways to **prevent AMR**, especially washing your hands, and getting vaccinated.

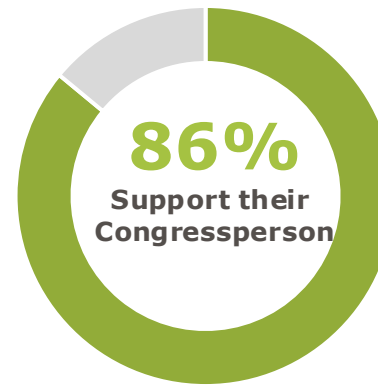
***Antimicrobials** – including antibiotics and antivirals – are medicines used to treat and prevent infections in humans, animals, and plants. **Antimicrobial resistance (AMR)** occurs when bacteria, viruses, fungi, and parasites mutate and **no longer respond** to these medicines.

Registered Voters are likely to support the Pasteur Act and elected officials who worked to get it passed.

While initial awareness of the Pasteur Act is very low...



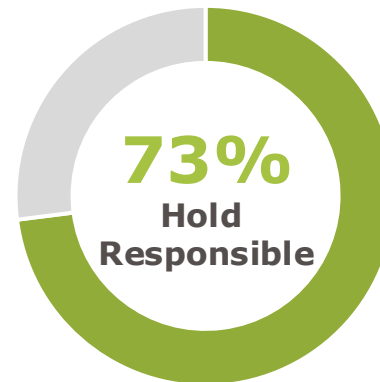
...and most would support a member of Congress who worked to get the bill passed



...upon learning more about it, the majority of voters would support it



...and hold elected officials responsible for solving the AMR problem



Voters who support the Pasteur Act are significantly more likely to hold elected officials *very or somewhat* responsible for solving AMR (77%)

What we learned: AMR Awareness



Registered voters have low awareness of the term “AMR”

- Many are **not able to correctly identify** descriptions of what AMR is
- This further contributes to a **lack of knowledge** of **complications** associated with the condition



Although it describes merely a subset of antimicrobial resistance, use of the term **“Antibiotic Resistance”** may help in getting a larger part of the population to **gain awareness of the complications of infections** – including overuse of antibiotics



Upon gaining a better understanding of what AMR is, the majority of voters recognize that AMR is a major problem

- Most also believe the **AMR problem is growing** and that it **poses a threat** to the general population
- However, **fewer than half** perceive the **ability to develop new drugs** as a major problem – thus not recognizing one of the main areas to combat AMR



In addition to educating the population on **AMR in general**, there is a need to **further elaborate on specific problems** that will help in the fight against AMR

What we learned: Antibiotic Use and Pasteur Act



Having patients complete their entire course of prescribed antimicrobials remains a challenge

- While **1 in 10** reporting that they did not complete the entire course **seems small**, it translates into a **high number of unfinished prescriptions (23.6M prescriptions)**



Education around the need to **finish the full course** of prescribed antibiotics remains **paramount** in the effort to alleviate antimicrobial resistance



Familiarity with the **Pasteur Act** is **relatively low**, but after learning that the bill aims to create incentives to develop new antimicrobials, voters are **likely to support it and the congressional representatives who supports the bill**

- A majority of voters (across parties) also **hold elected officials responsible** for solving the AMR problem



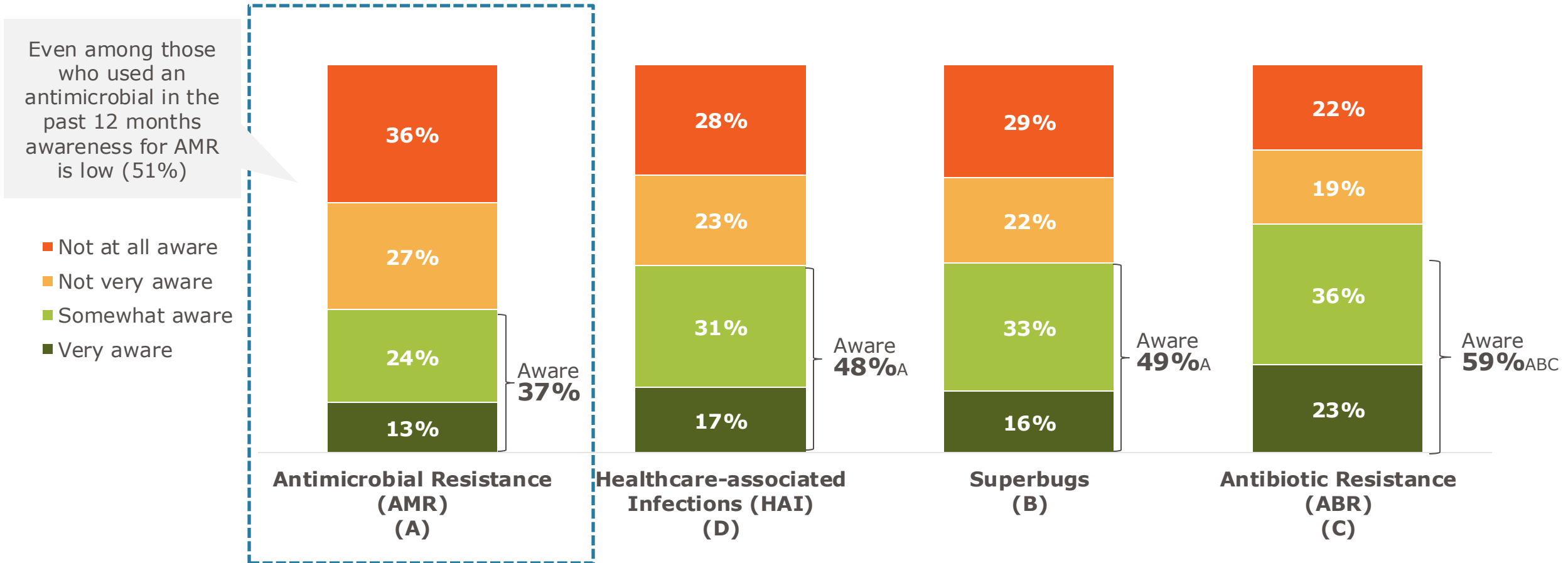
While it will be **important to educate** the voter population on what the Pasteur Act entails, their **broad support** of the bill once they have more knowledge, and the fact that they **hold their elected officials responsible**, should help in efforts to get members of Congress to work on **getting the bill passed**

Detailed Findings:

Antimicrobial Awareness and Usage

Awareness for the term “Antimicrobial Resistance (AMR)” is significantly lower than for “Healthcare-associated Infections (HAI)”, “Superbugs”, or “Antibiotic Resistance (ABR)”.

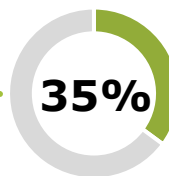
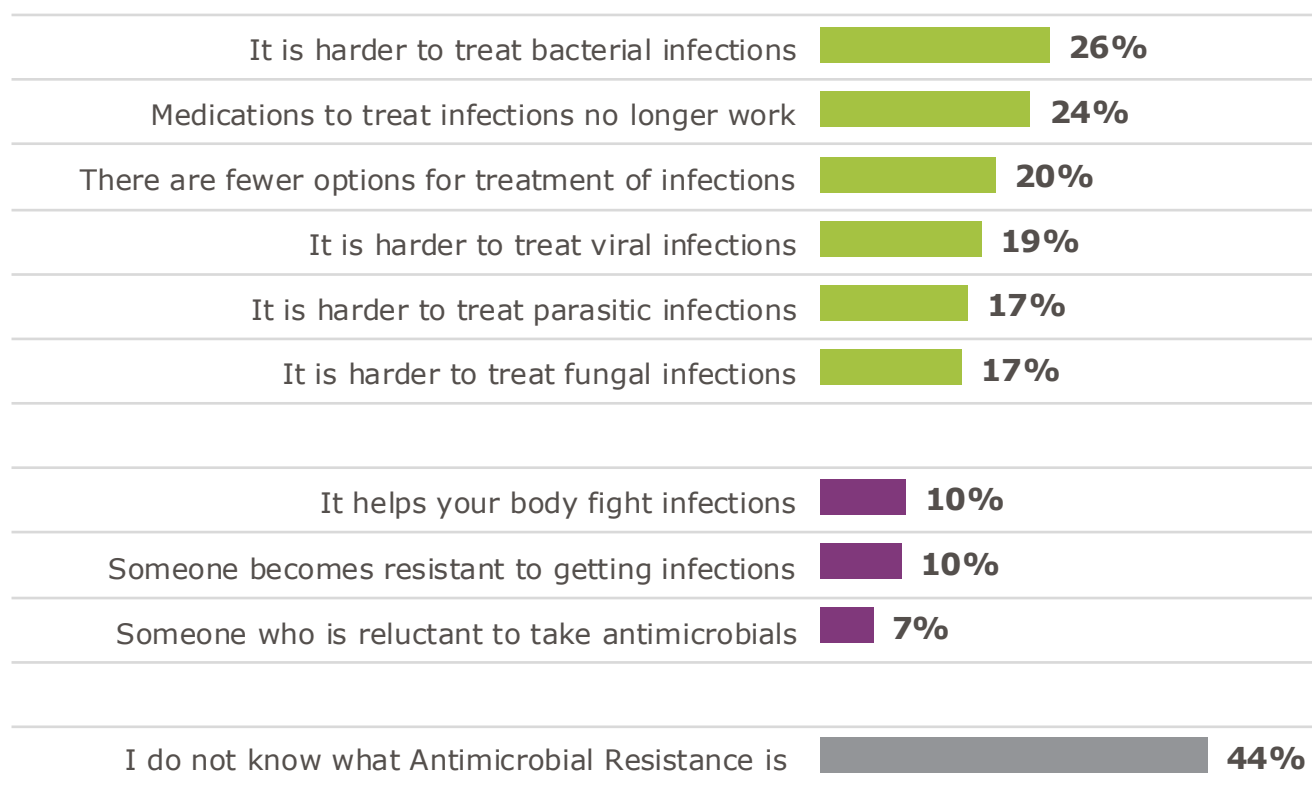
Awareness of Terminology



Close to half do not know what Antimicrobial Resistance is. Among those who do, there is some confusion how to describe AMR or its effects, with 1 in 5 identifying at least one faulty description.

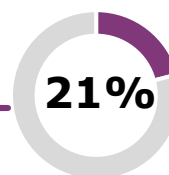
Statements Identified to Describe AMR or Its Effects

■ Correct descriptions ■ Incorrect descriptions

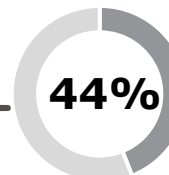


Identified only correct descriptions of AMR and its effects

Among those who are **aware of AMR**, **61%** identified only correct descriptions, but **39%** selected at least 1 incorrect one



Identified at least 1 Incorrect description of AMR and its effects



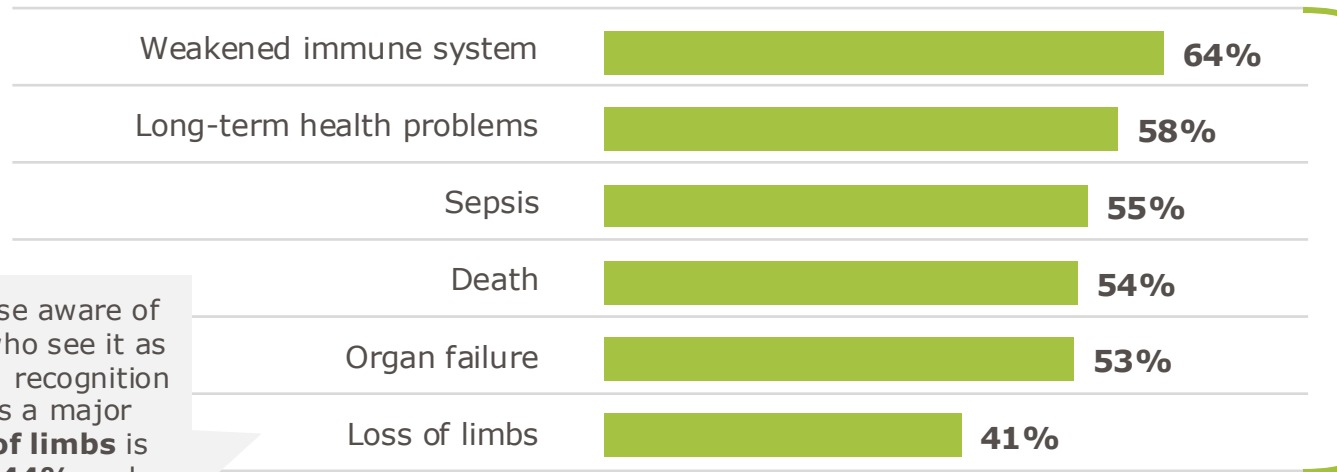
Cannot identify what AMR is

Even among those who **used an antimicrobial** in the past 12 months, **32%** do not know what AMR is

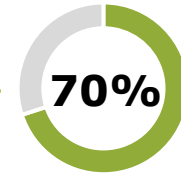
Just over half correctly recognize that infections can lead to serious health problems, including sepsis and even death, but fewer than half recognize they can lead to loss of limbs

Perceived Complications of Infections

■ Correct complications ■ Incorrect complications

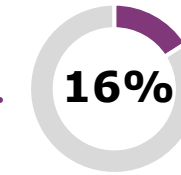
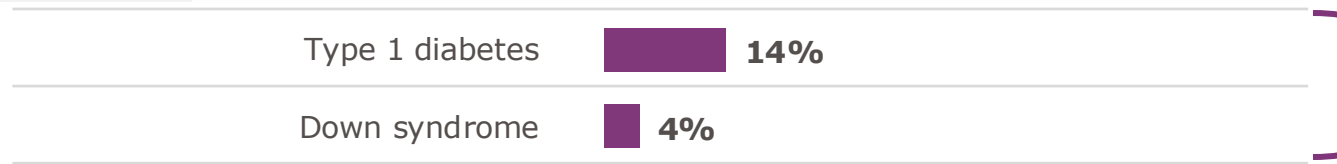


Those aware of AMR are significantly more likely than the total to identify only correct descriptions (**74%**)
Among those who see AMR as a major problem this increases to **77%**.

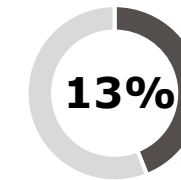


Identified only correct complications of and its effects
(18% identified all correct complications)

Even among those aware of AMR and those who see it as a major problem, recognition that infection is a major cause for **loss of limbs** is relatively low (**44%** and **48%** respectively).



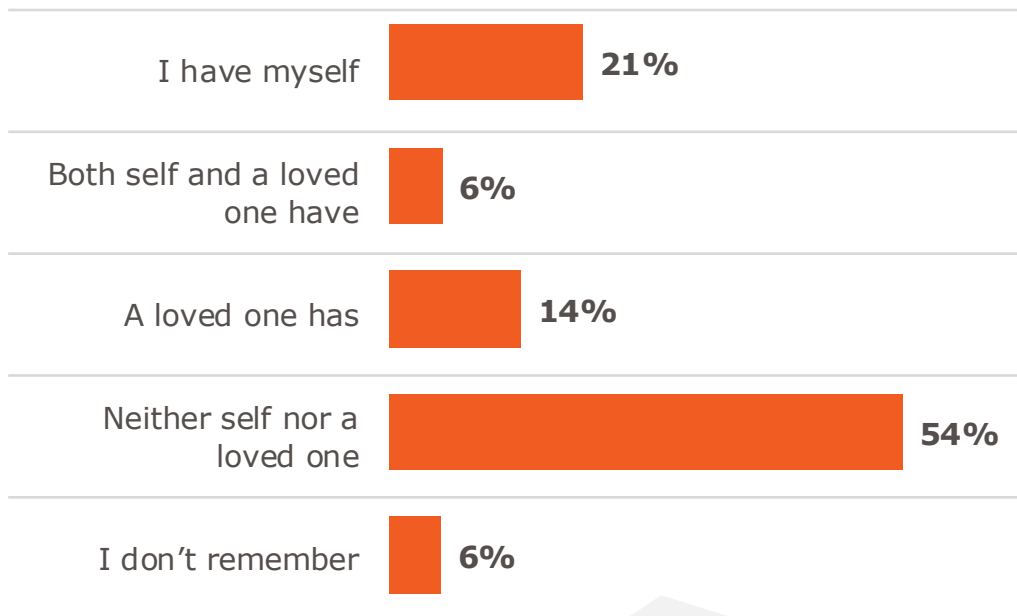
Identified at least 1 Incorrect description of AMR and its effects



Were not sure of complications

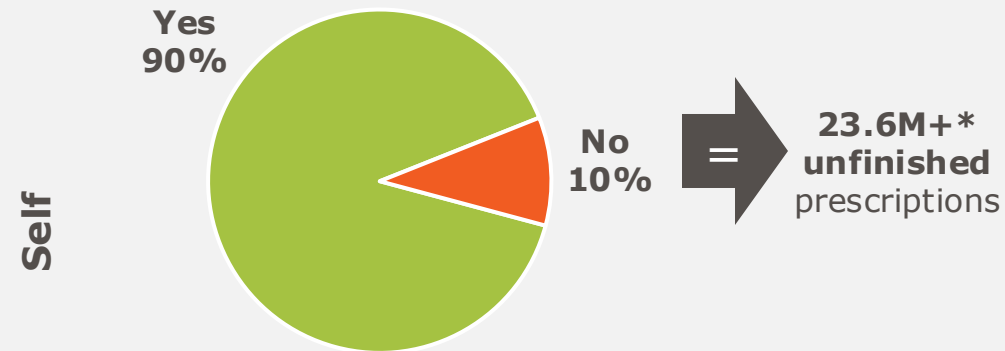
Almost half of registered voters indicate that in the past 12 months they either took an antimicrobial themselves or a loved one did. Just over 1 in 10 did not finish the entire course, equaling to around 23.6M unfinished prescriptions annually

Took Antimicrobial Prescription in Past 12 Months?

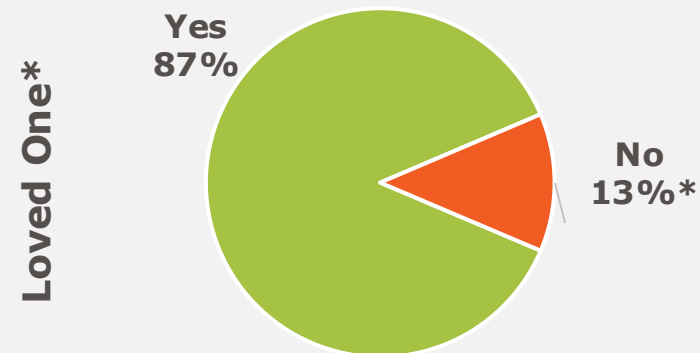


Those **who don't see AMR as a problem** are more than twice as likely to not remember taking an antimicrobial (**16%**)

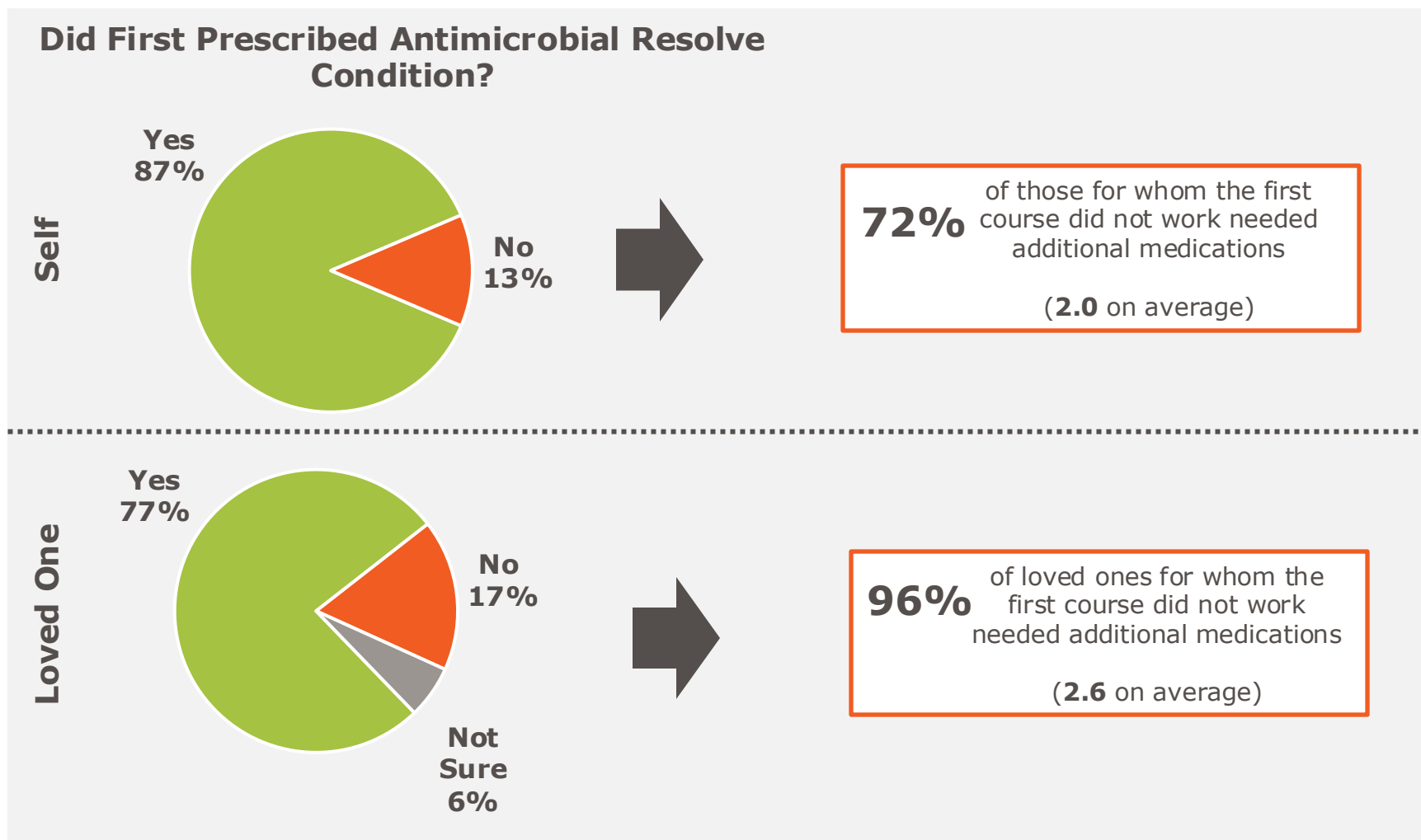
Completed Entire Course of Antimicrobial?



*Based on 2022 CDC estimate of 236.4M antibiotic prescriptions total. Total number may be higher because data for minors/elderly may not have been captured.



For some, the prescription did not work, and they required additional medications – more than 2 on average.



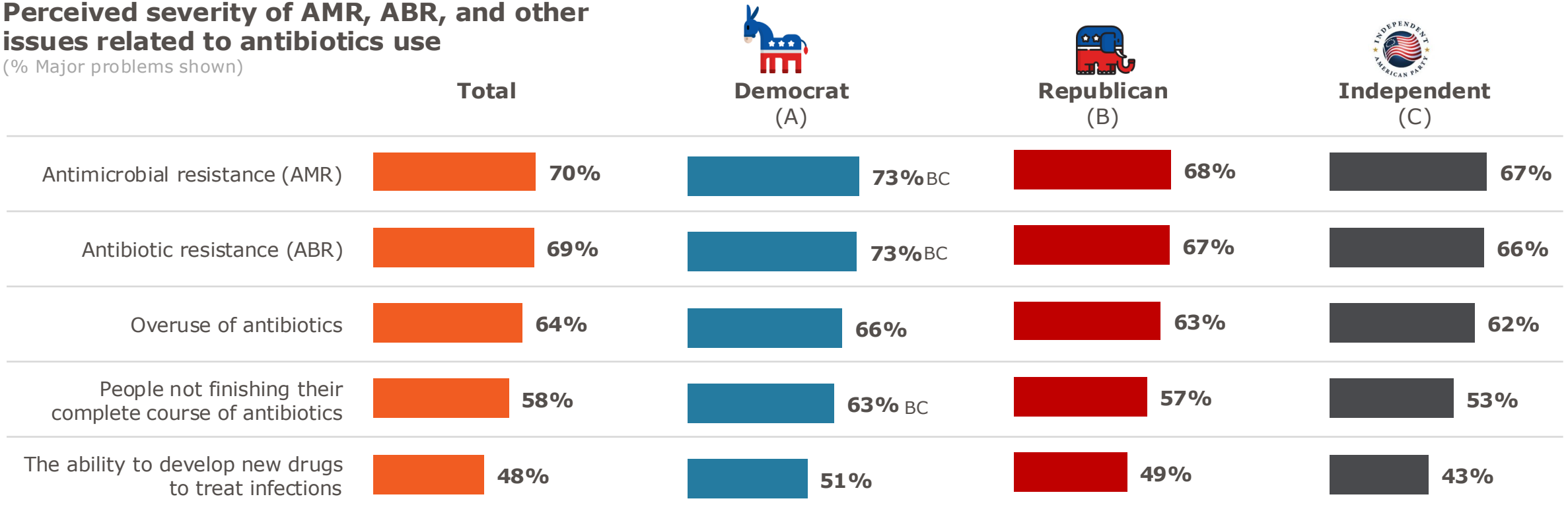
Detailed Findings:

Antimicrobial Resistance Perceptions

AMR, ABR overuse and not finishing the complete course of antibiotics are recognized as **major problems** by most voters. In contrast, **just under half** recognize the impact on the ability to develop new drugs to treat infections.

Perceived severity of AMR, ABR, and other issues related to antibiotics use

(% Major problems shown)



Note: Respondents were given the following description of AMR: antimicrobials – including antibiotics and antivirals – are medicines used to treat and prevent infections in humans, animals, and plants. **Antimicrobial resistance (AMR)** occurs when bacteria, viruses, fungi, and parasites mutate and **no longer respond** to these medicines.

While Democrats are slightly more likely to recognize the severity of AMR, ABR, and people not finishing their antibiotics, they are equally likely as Republicans to be less concerned about the ability to develop new drugs to treat infections (51% vs. 49%)

Base Total respondents n=2021; Identify as Democrats n=794; Identify as Republicans n=690; Identify as Independents, n=490.

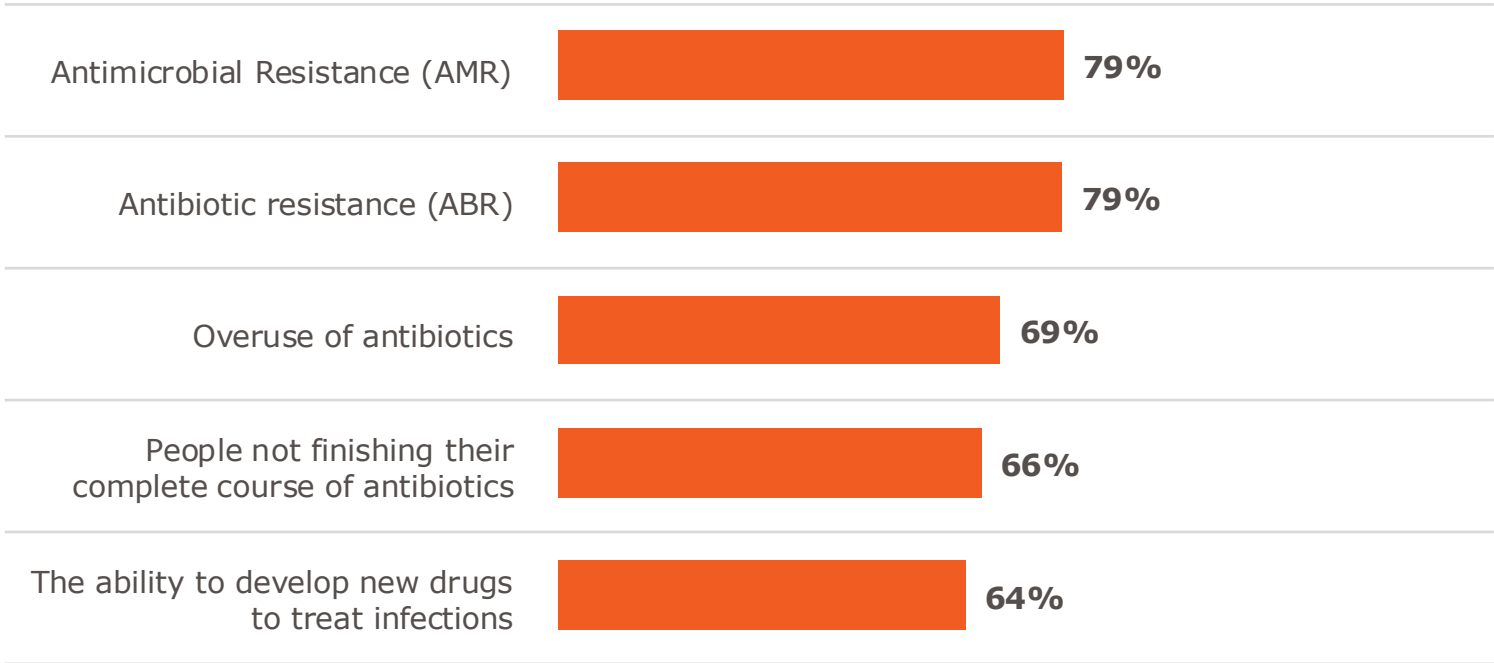
Capital letters indicate a significant difference between groups at the 95% confidence level.

C1. Please indicate if you would consider any of the issues listed a major problem, a minor problem, or not a problem at all.

More than two-thirds of the voters are **worried about issues related to antibiotics use**, regardless of party affiliation. Again, they are least worried about the ability to develop new drugs or infections.

Worries about AMR, ABR, and other issues related to antibiotics use

(% Very/somewhat worried shown among Total Respondents)

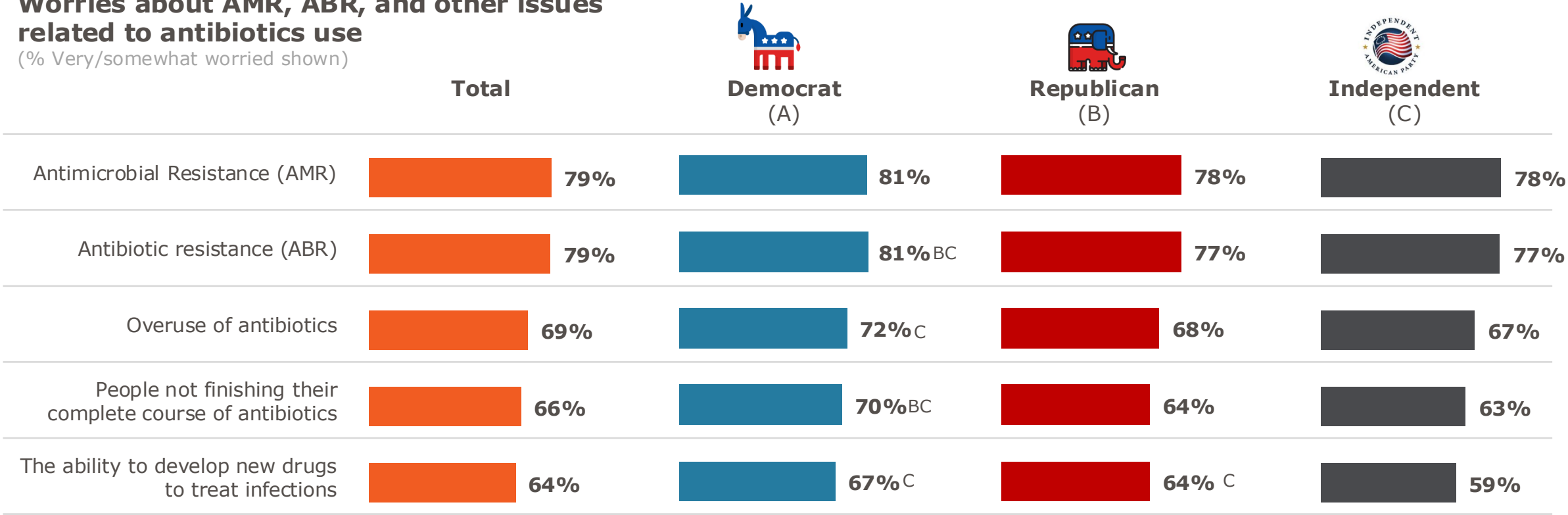


Those who are aware of AMR and those who consider AMR a *major* problem are much more likely than those who are not aware and who see it as a minor problem to be concerned about *all* issues related to antibiotics use.

More than two-thirds of the voters are **worried** about issues related to antibiotics use.

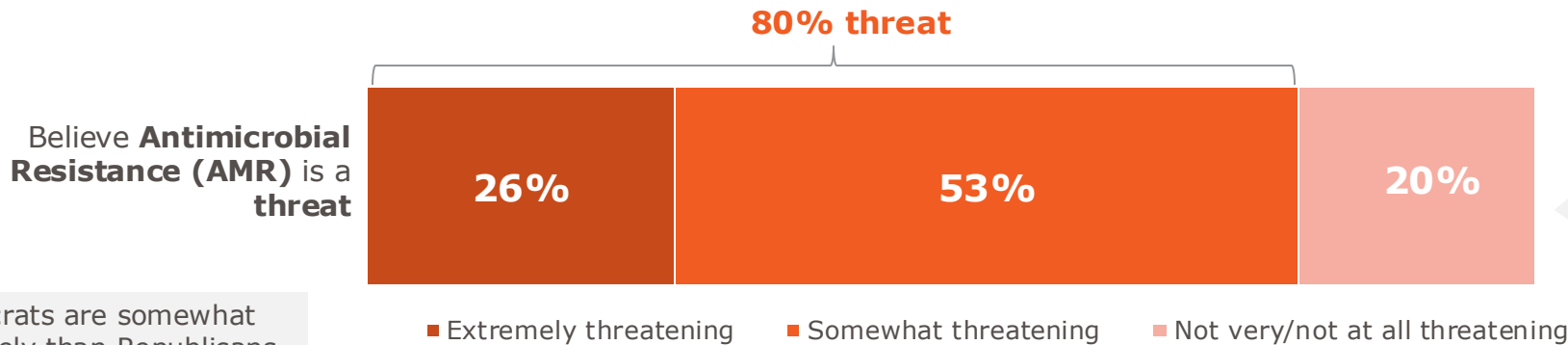
Worries about AMR, ABR, and other issues related to antibiotics use

(% Very/somewhat worried shown)



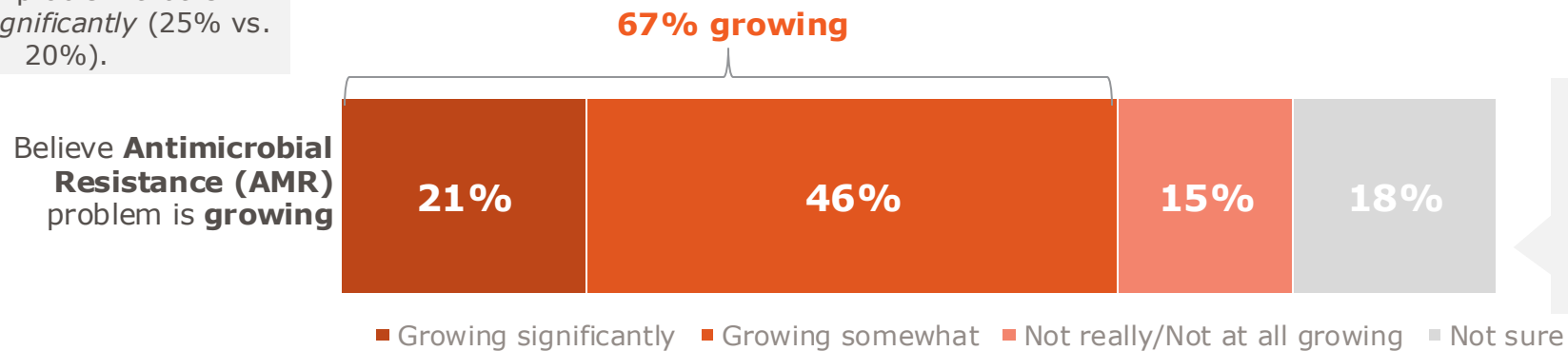
Across party lines, a majority of registered voters believe AMR is a threat and that the problem is growing. As AMR awareness increases, so do concerns around and the perceived threat of AMR.

Threat posed by AMR and Expectations that Problem is Growing



Those who are **aware of AMR** and those who **used an antimicrobial** are more likely than those who are not aware and who did not use an antimicrobial to believe AMR is a threat.

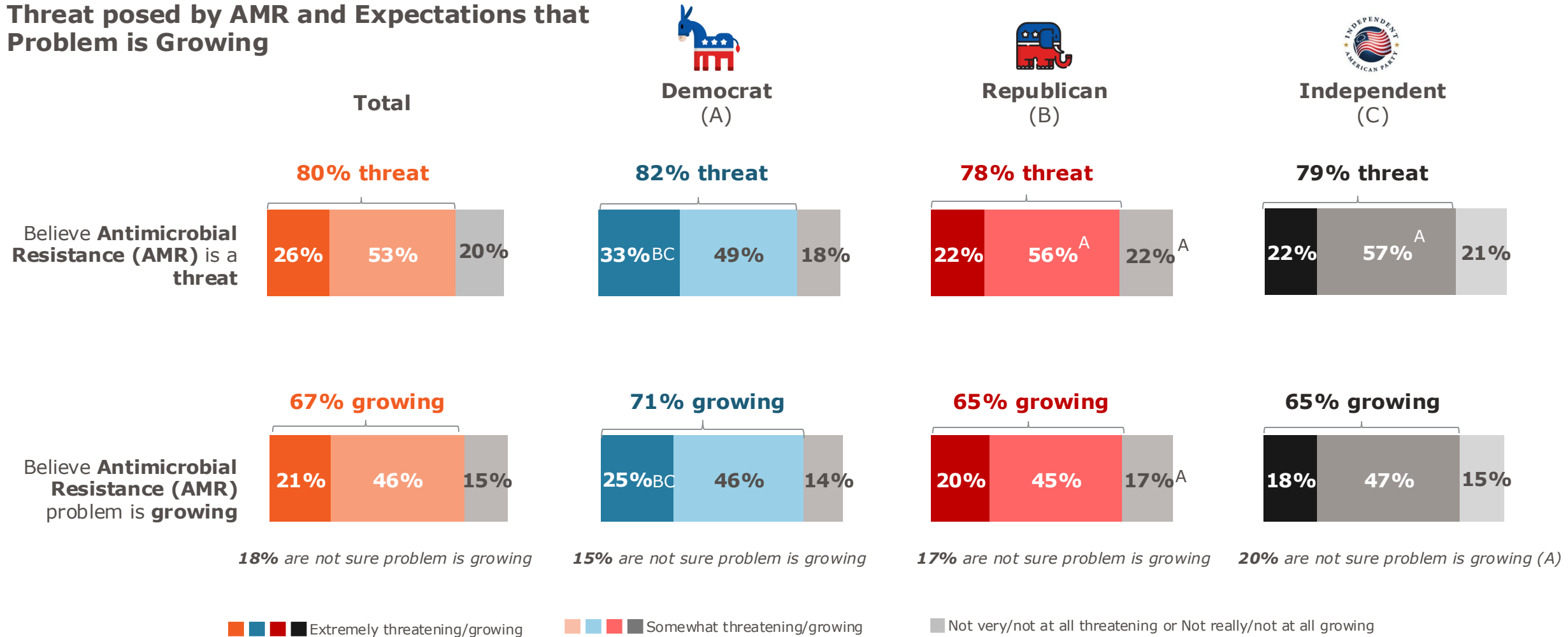
Democrats are somewhat more likely than Republicans to see AMR as *extremely* threatening (33% vs. 22%), or as a problem that is growing *significantly* (25% vs. 20%).



Those **who are not aware of AMR** and **who did not use an antimicrobial** are more likely to be **unsure** about how the AMR problem is growing (24% and 22% respectively)

Across party lines, majority of voters believe AMR is a threat and that the problem is growing.

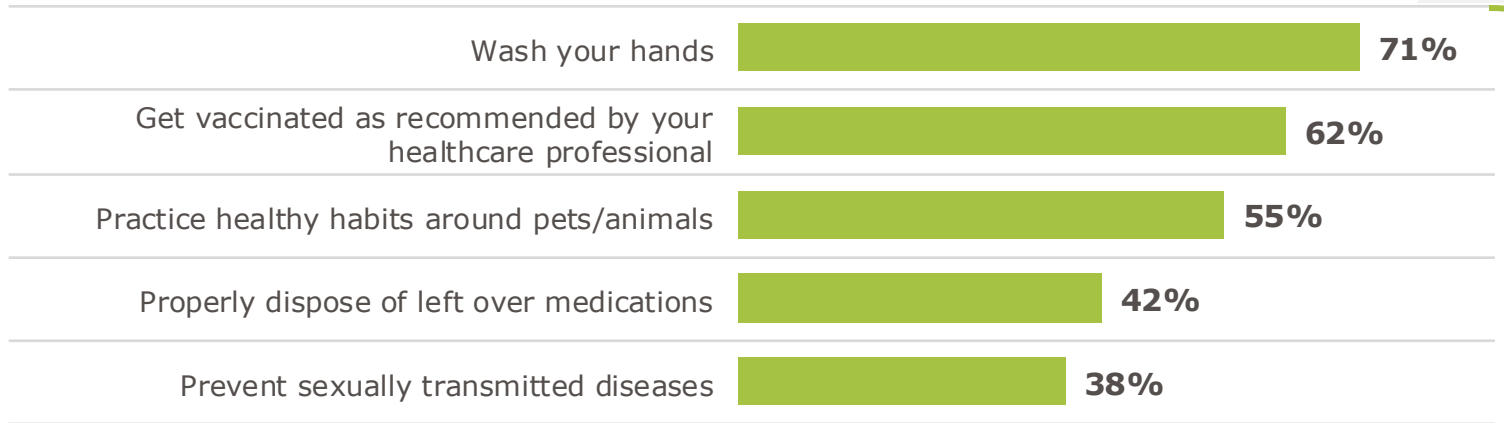
Threat posed by AMR and Expectations that Problem is Growing



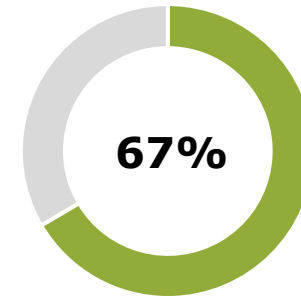
The majority of registered voters accurately identify at least one correct way to prevent AMR. However, 3 in 10 are somewhat confused, identifying at least one flawed preventative method.

Ways to Prevent AMR

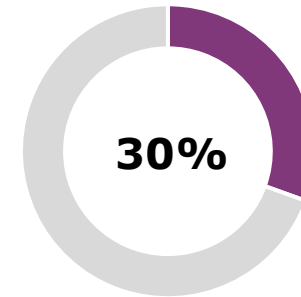
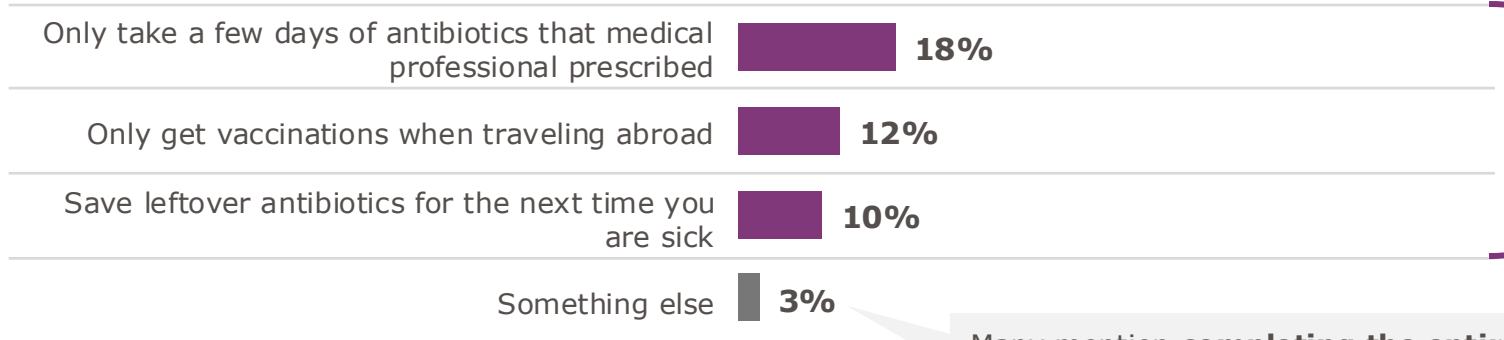
Correct ways Incorrect ways



Washing your hands, getting vaccinated, and preventing sexually transmitted diseases are recognized ways to prevent regardless of AMR awareness levels.



Identified only correct ways to prevent AMR (i.e., did not select any invalid way to prevent AMR)



Identified at least 1 incorrect way to prevent AMR

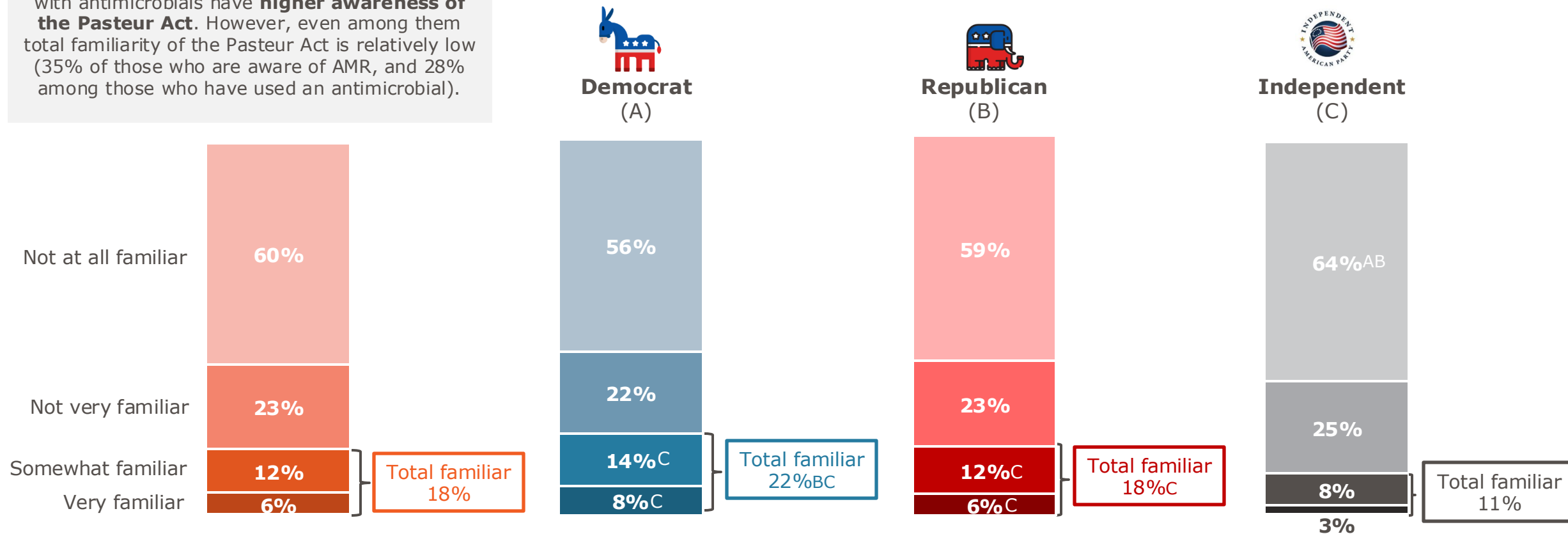
Many mention **completing the entire course** of antibiotics as another way to prevent AMR, and many don't know. A few focus on developing **healthy habits** (food, exercise, etc.)

Detailed Findings: Legislation

Familiarity with the Pasteur Act is low among all registered voters.

Those who were **aware of AMR** prior to getting the definition and those who **have experience** with antimicrobials have **higher awareness of the Pasteur Act**. However, even among them total familiarity of the Pasteur Act is relatively low (35% of those who are aware of AMR, and 28% among those who have used an antimicrobial).

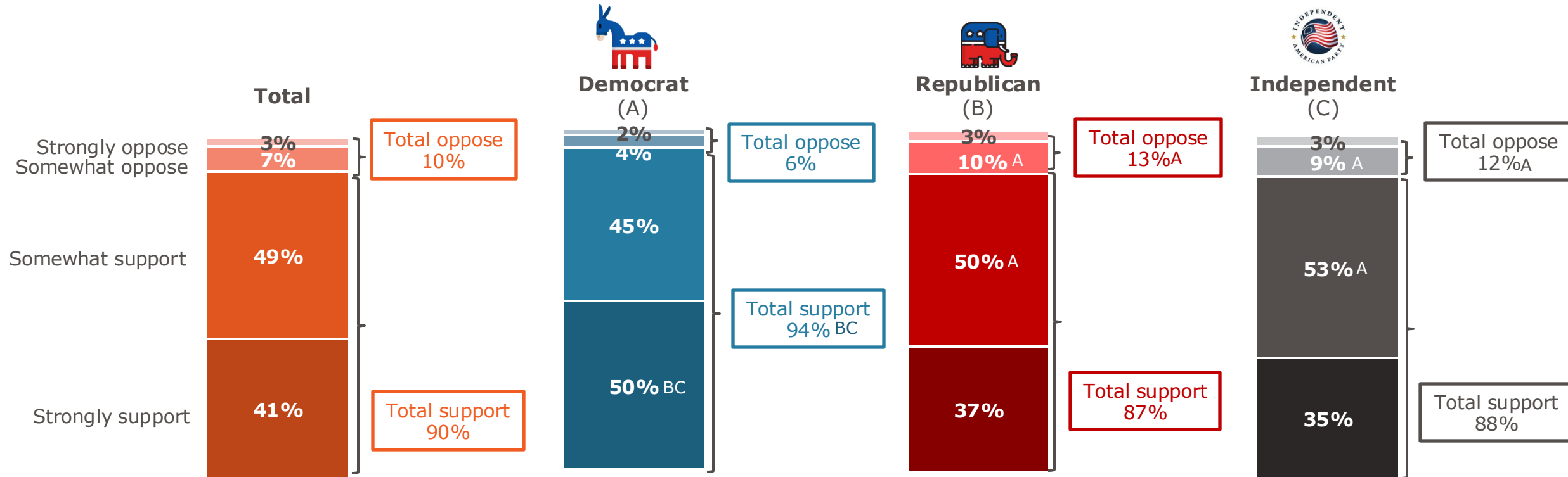
Familiarity with the Pasteur Act



Once described, there is near universal support for the Pasteur Act,

The Pasteur Act is a bill under consideration in Congress that would help incentivize companies to develop antimicrobial medicines for infections in which there is an unmet medical need, anticipated clinical need, or drug resistance.

Support of the Pasteur Act Based on Description

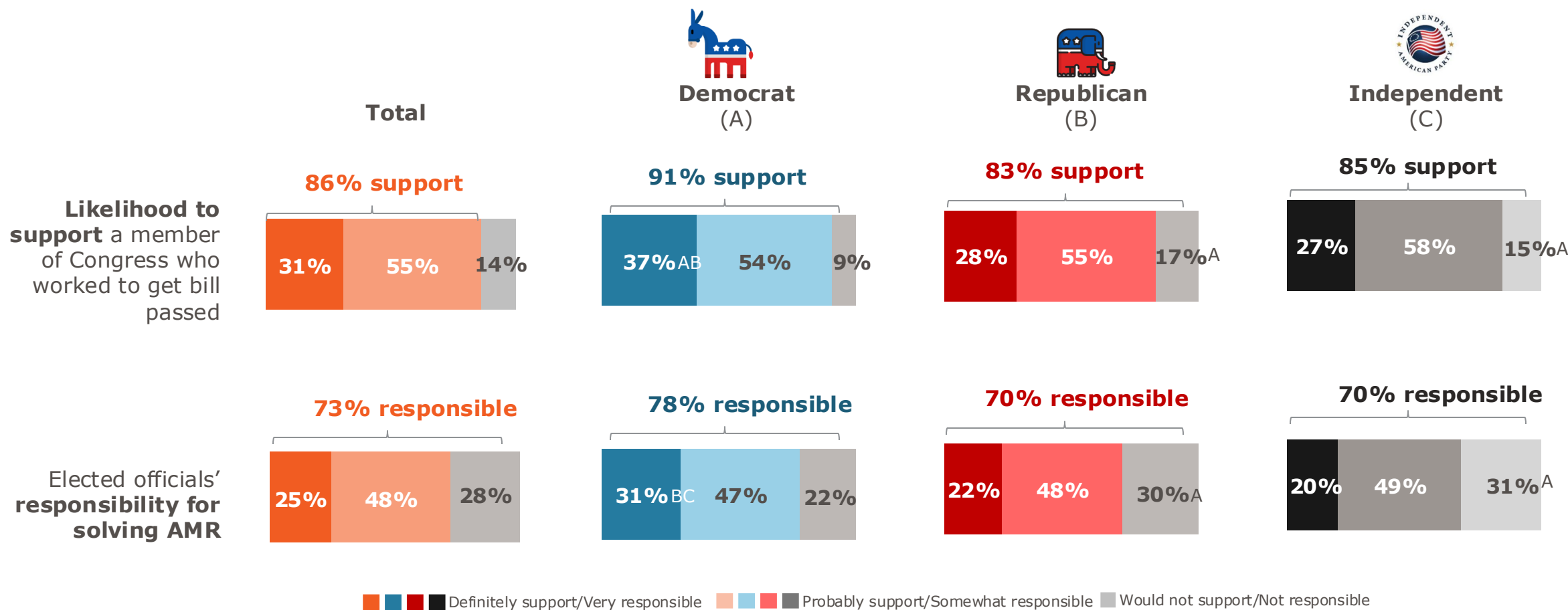


Base Total respondents n=2021; Identify as Democrats n=794; Identify as Republicans n=690; Identify as Independents, n=490.

Capital letters indicate a significant difference between groups at the 95% confidence level.

D2. Based on what you know, including the above description you just read, do you support or oppose the bill that would establish a public-private partnership to increase availability of antimicrobials for those in government sponsored health care programs?

The majority of voters across party lines would support a Congress member working to get the Pasteur Act passed. Similarly, most believe it's an elected official's responsibility to solve AMR.

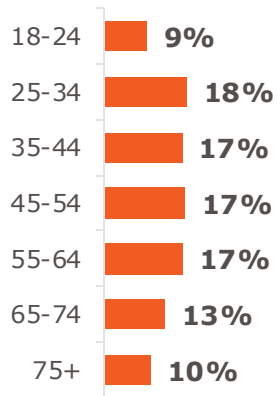


Profiles:

Registered Voters

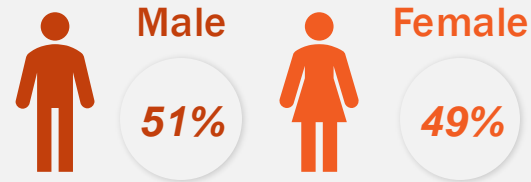
Profile: Total Registered Voters

Age

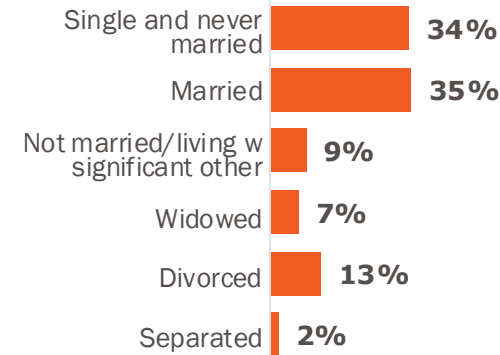



Average Age:
49

Gender



Marital Status

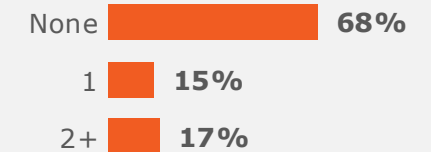


Household Size



2.6
Average Size of HH

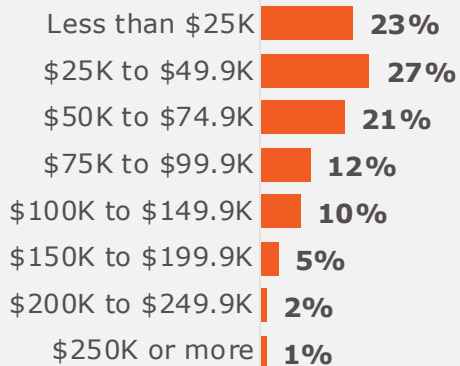
Children per Household



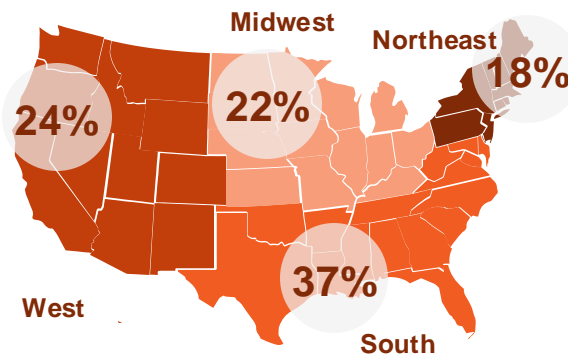
HH Income



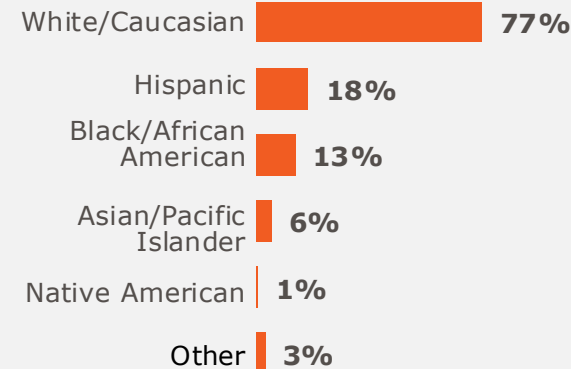
Average Income: **67k**



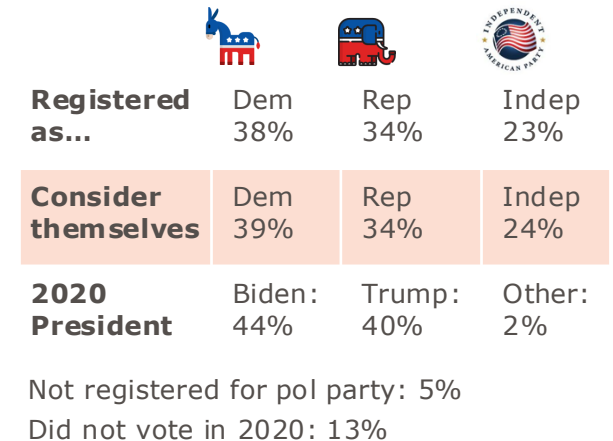
Region



Race/Ethnicity

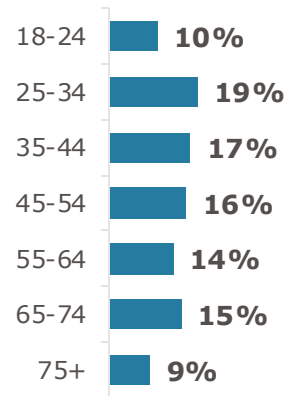


Political Affiliation



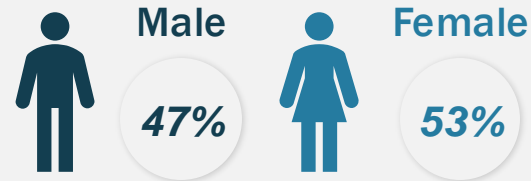
Profile: Self-Described Democrats

Age

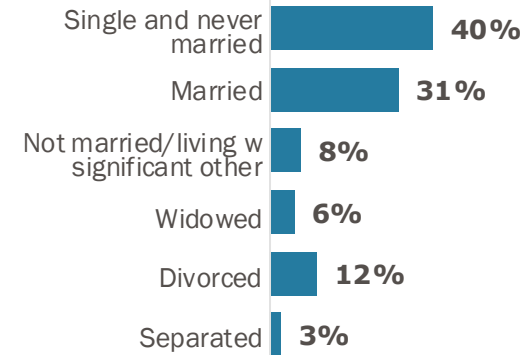



Average Age:
48

Gender



Marital Status

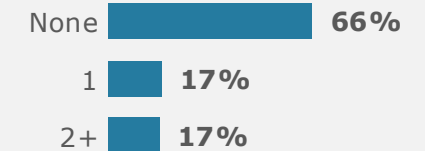


Household Size



2.6
Average Size of HH

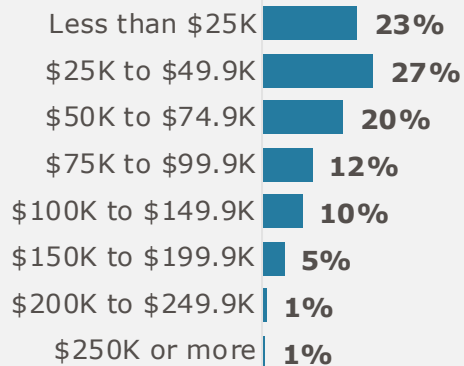
Children per Household



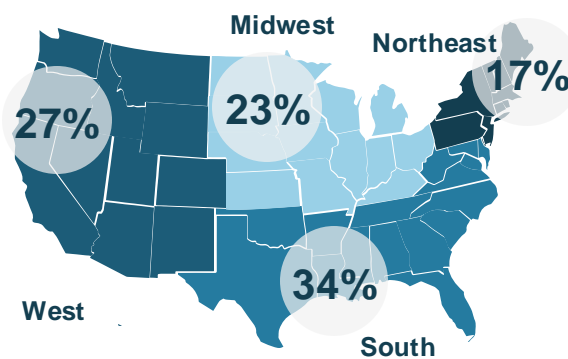
HH Income



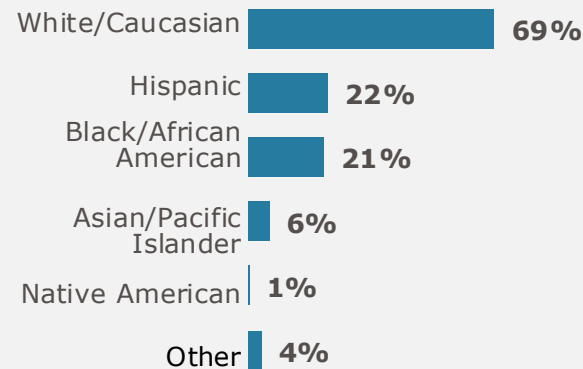
Average Income: **66k**



Region



Race/Ethnicity



Political Affiliation



Registered as...

Dem	92%
Rep	1%
Indep	5%

Consider themselves

Dem	100%
Rep	0%
Indep	0%

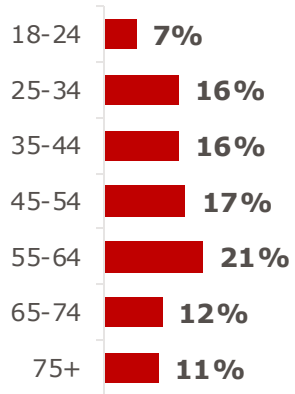
2020 President

Biden:	82%
Trump:	7%
Other:	1%

Not registered for pol party: 2%
Did not vote in 2020: 10%

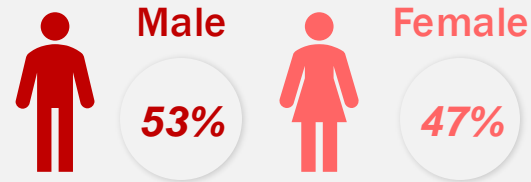
Profile: Self-Described Republicans

Age

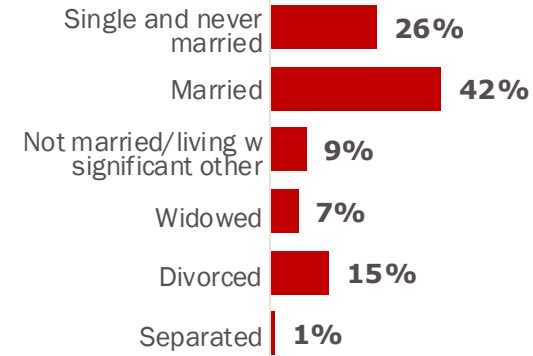



Average Age:
51

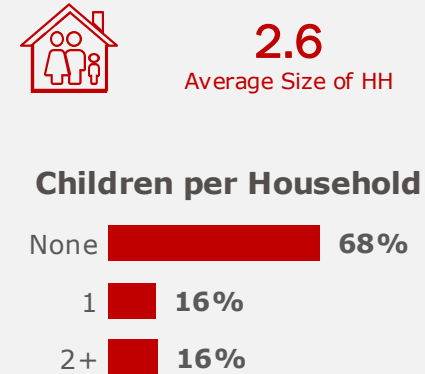
Gender



Marital Status

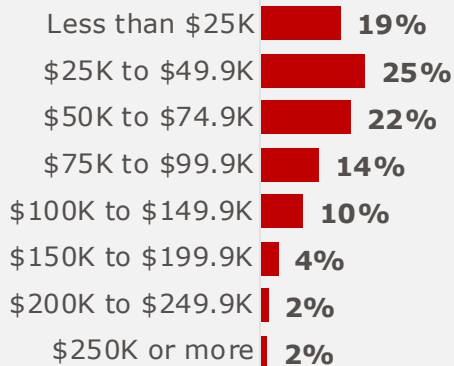


Household Size

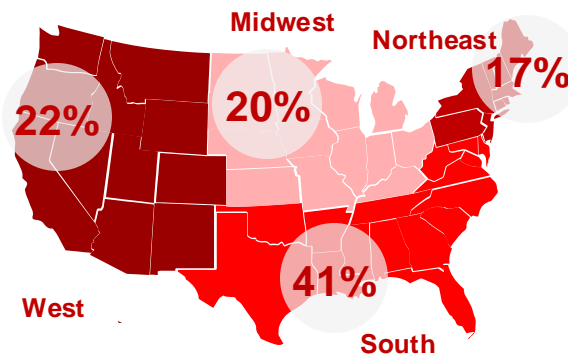


HH Income

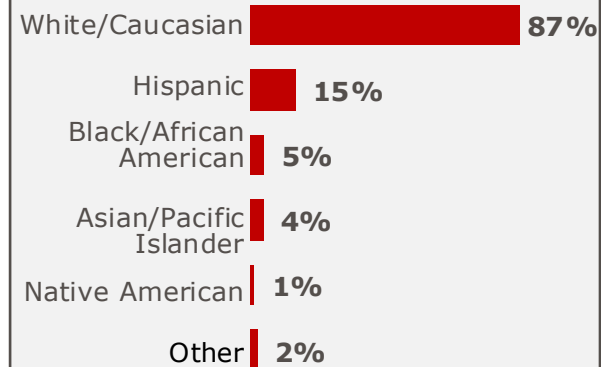
 Average Income: **70k**



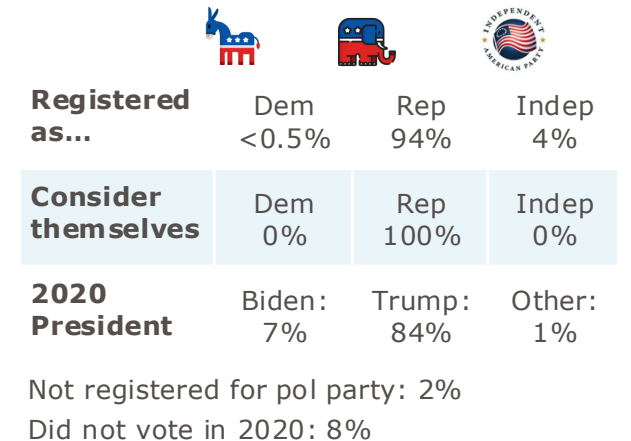
Region



Race/Ethnicity

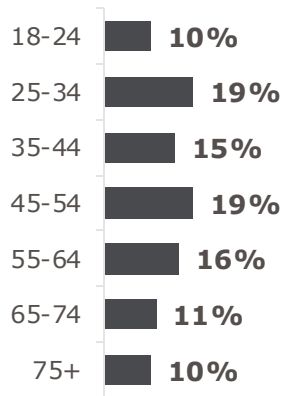


Political Affiliation



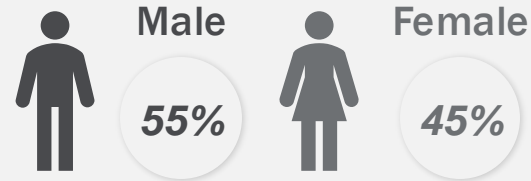
Profile: Self-Described Independents

Age

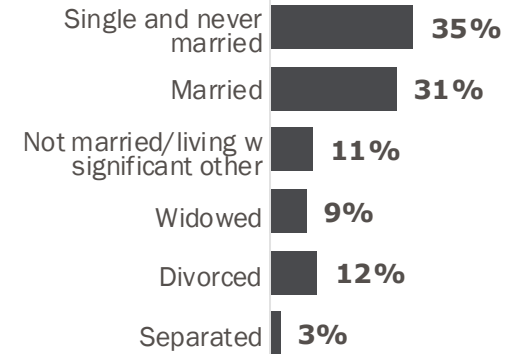



Average Age:
48

Gender



Marital Status

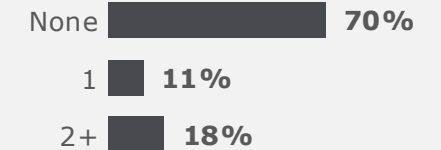


Household Size



2.7
Average Size of HH

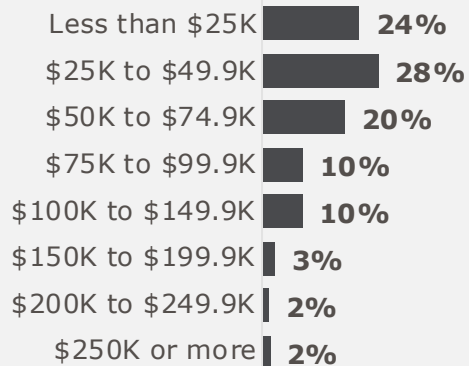
Children per Household



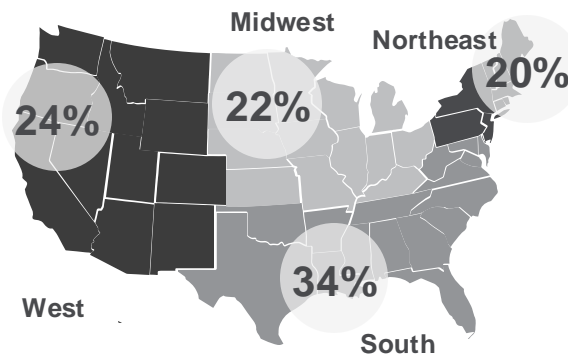
HH Income



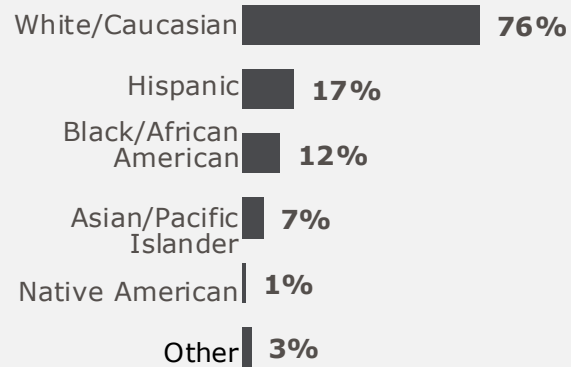
Average Income: **66k**



Region



Race/Ethnicity



Political Affiliation



Registered as... Dem 6% Rep 5% Indep 82%

Consider themselves Dem 0% Rep 0% Indep 100%

2020 President Biden: 37% Trump: 34% Other: 5%

Not registered for pol party: 8%
Did not vote in 2020: 23%

Appendix

radius

Appendix

Data supporting callouts in “Antimicrobial Resistance Perceptions” and “Legislation” sections

Perceived Severity of Issues Related to Antibiotics Use

Percent who perceive issue as a *major* problem

	Political Affiliation		AMR Awareness		Used Antimicrobials in Past 12 Months?		See AMR as...	
	Democrat	Republican	Somewhat/ Very Aware	Not Very/ Not at all Aware	Yes (Self and/or Loved one)	No	Major Problem	Minor Problem
<i>Base: Total Respondents</i>	794	690	743	1278	813	1094	1408	432
Antimicrobial Resistance (AMR)	73%	68%	76%↑	66%	71%	71%	100%	-
Overuse of antibiotics	66%	63%	72%↑	60%	65%	64%	75%↑	49%
The ability to develop new drugs to treat infections	51%	49%	55%↑	44%	50%	48%	58%↑	33%
People not finishing their complete course of antibiotics	63%	57%	65%↑	54%	62%↑	57%	69%↑	40%
Antibiotic resistance (ABR)	73%	67%	77%↑	64%	70%	70%	88%↑	33%

Worries about AMR, ABR, and other issues related to antibiotics use

Percent who are very/somewhat worried

	Political Affiliation		AMR Awareness		Used Antimicrobials in Past 12 Months?		See AMR as...	
	Democrat	Republican	Somewhat/ Very Aware	Not Very/ Not at all Aware	Yes (Self and/or Loved one)	No	Major Problem	Minor Problem
<i>Base: Total Respondents</i>	794	690	743	1278	813	1094	1408	432
Antimicrobial Resistance (AMR)	81%	78%	88%↑	73%	83%↑	77%	89%↑	65%
Overuse of antibiotics	72%	68%	80%↑	63%	75%↑	66%	77%↑	62%
The ability to develop new drugs to treat infections	67%	64%	72%↑	59%	70%↑	60%	69%↑	61%
People not finishing their complete course of antibiotics	70%↑	64%	77%↑	60%	72%↑	62%	73%↑	59%
Antibiotic resistance (ABR)	81%↑	77%	89%↑	72%	84%↑	76%	88%↑	67%

Perceived threat posed by AMR

	Political Affiliation		AMR Awareness		Used Antimicrobials in Past 12 Months?		See AMR as...	
	Democrat	Republican	Somewhat/ Very Aware	Not Very/ Not at all Aware	Yes (Self and/or Loved one)	No	Major Problem	Minor Problem
<i>Base: Total Respondents</i>	794	690	743	1278	813	1094	1408	432
Extremely threatening	33%↑	22%	37%↑	20%	33%↑	22%	33%↑	11%
Somewhat threatening	49%	56%	53%	53%	51%	55%↑	56%	57%
Not very / not at all threatening	18%	22%↑	10%	27%↑	16%	22%↑	11%	32%↑

Believe AMR problem is growing

	Political Affiliation		AMR Awareness		Used Antimicrobials in Past 12 Months?		See AMR as...	
	Democrat	Republican	Somewhat/ Very Aware	Not Very/Not at all Aware	Yes (Self and/or Loved one	No	Major Problem	Minor Problem
<i>Base: Total Respondents</i>	794	690	743	1278	813	1094	1408	432
Growing significantly	25%↑	20%	33%↑	14%	30%↑	16%	26%↑	12%
Growing somewhat	46%	45%	51%↑	43%	48%	46%	49%	47%
Not really / Not at all growing	14%	17%↑	10%	18%↑	12%	17%↑	10%	24%↑
Not sure	15%	17%	6%	24%↑	10%	22%↑	15%	17%

Familiarity with and Support of the Pasteur Act

	Political Affiliation		AMR Awareness		Used Antimicrobials in Past 12 Months?		See AMR as...	
	Democrat	Republican	Somewhat/ Very Aware	Not Very/ Not at all Aware	Yes (Self and/or Loved one)	No	Major Problem	Minor Problem
<i>Base: Total Respondents</i>	794	690	743	1278	813	1094	1408	432
Very familiar	8%	6%	12%↑	2%	11%↑	2%	6%	8%↑
Somewhat familiar	14%	12%	22%↑	6%	17%↑	8%	11%	16%↑
Not very familiar	22%	23%	27%↑	21%	24%	22%	22%	28%↑
Not at all familiar	56%	59%	39%	72%↑	48%	67%↑	62%↑	48%

Support of the Pasteur Act

	Political Affiliation		AMR Awareness		Used Antimicrobials in Past 12 Months?		See AMR as...	
	Democrat	Republican	Somewhat/ Very Aware	Not Very/Not at all Aware	Yes (Self and/or Loved one)	No	Major Problem	Minor Problem
<i>Base: Total Respondents</i>	794	690	743	1278	813	1094	1408	432
Strongly support	73%	68%	76%↑	66%	71%	71%	100%	-
Somewhat support	73%	63%	72%↑	60%	65%	64%	75%↑	49%
Somewhat oppose	51%	49%	55%↑	44%	50%	48%	58%↑	33%
Strongly oppose	63%	57%	65%↑	54%	62%↑	57%	69%↑	40%

Likelihood to support member of Congress who worked to get the bill passed

	Political Affiliation		AMR Awareness		Used Antimicrobials in Past 12 Months?		See AMR as...	
	Democrat	Republican	Somewhat/ Very Aware	Not Very/Not at all Aware	Yes (Self and/or Loved one)	No	Major Problem	Minor Problem
<i>Base: Total Respondents</i>	794	690	743	1278	813	1094	1408	432
Definitely would	37%↑	28%	43%↑	24%	37%↑	28%	37%↑	17%
Probably would	54%	55%	51%	58%↑	53%	57%↑	55%	63%↑
Probably would not	7%	13%↑	6%	14%↑	9%	12%↑	7%	17%↑
Definitely would not	2%	3%	1%	4%↑	1%	4%↑	1%	4%↑

Elected official(s) level of responsibility for solving AMR

	Political Affiliation		AMR Awareness		Used Antimicrobials in Past 12 Months?		See AMR as...	
	Democrat	Republican	Somewhat/ Very Aware	Not Very/Not at all Aware	Yes (Self and/or Loved one)	No	Major Problem	Minor Problem
<i>Base: Total Respondents</i>	794	690	743	1278	813	1094	1408	432
Very responsible	31%↑	22%	35%↑	19%	32%↑	20%	28%↑	18%
Somewhat responsible	47%	48%	47%	48%	45%	50%↑	47%	55%↑
Not very responsible	18%	24%↑	17%	26%↑	20%	24%↑	22%	22%
Not at all responsible	4%	6%↑	2%	7%↑	3%	6%↑	3%	5%↑